ET Docket No. 03-104

I hold BS and MS degrees in Electrical Engineering, and a Doctor of Engineering Degree from Texas A&M University. I am a registered professional engineer in Texas. I hold the FCC General Radiotelephone Operators License with Radar endorsement. I hold an extra class amateur radio operators license. I am the retired Director of Research and Advanced Systems Engineering for TXU, one of the US's largest private utilities. I served as the Manager of Telecommunication Engineering and Planning for TXU and am very familiar with all aspects of power utility communication requirements, competition and technologies.

In response to the assertion by the Utility Power Line Council and Power Line Communication Association that there have been no complaints of interference in the trial PLC systems, I submit the following. At the request of TXU, I traveled to the Cape Girardeau, Missouri test site where Main.Net-PLC equipment is installed. That equipment has been certified as being compliant with part 15. I set up a mobile testing station in the vicinity of a line energized with broadband power line carrier. Interference from the line at a distance of 25 ft was as large as "on air" signals from strong stations. (S-7 to S-9)

With the permission of an operator on the air, I recorded his conversation along with the PLC noise in order to demonstrate the amount of interference produced by the system. The recording can be heard by going to the URL listed below and selecting Recording 1, or Recording 2.
http://www.tarleton.edu/~talley/recordings.htm

Had I been a resident of the area, and had to suffer the operating environment presented by the equipment, I can assure you I would have complained.

In response to the assertion that users of these frequencies who are negatively affected be given alternative frequencies as suggested by the American Public Power Association: There is no frequency domain that interacts with the ionosphere the way that the HF radio spectrum does. Point to point long range communication is only possible in this frequency range due to the physics of the interaction of propagating waves and charged particles, over which this body has no jurisdiction. It is not even possible to move away from the interfering signals within the HF band as the nature of broadband is that it is spread over the entire range of frequencies. In essence, there is no place to go.